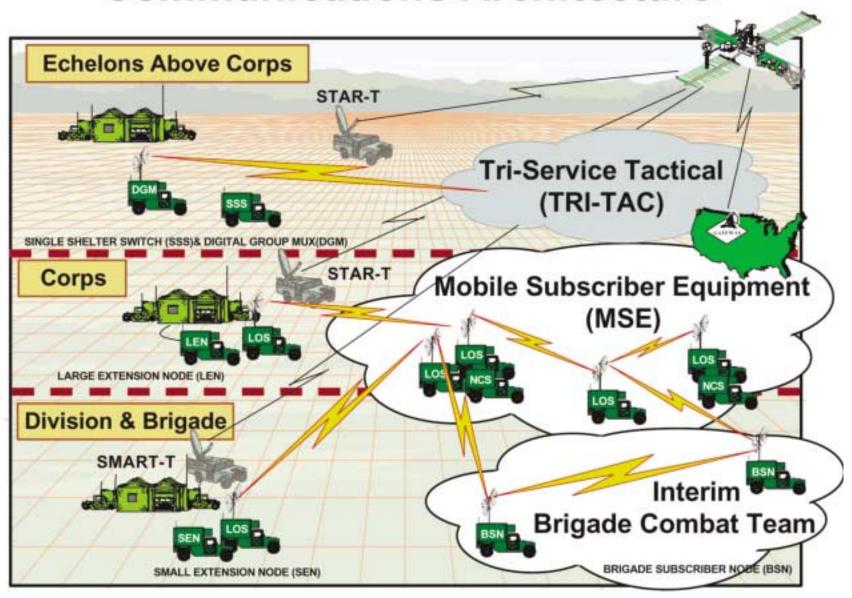
Area Common User System (ACUS) Communications Architecture



MISSION

Support the power projection force of the 21st century, from sustaining base to foxhole, through planned modifications to the Area Common User System (ACUS) and support for its migration to the Army's Warfighter Information Network–Tactical (WIN-T) systems architecture.

DESCRIPTION AND SPECIFICATIONS

The Area Common User System Modernization Program (ACUS MOD) consists of planned upgrades to the Mobile Subscriber Equipment (MSE) system at echelons at corps and below, Tri-Service Tactical Communications (TRI-TAC) system at echelons above corps, and support for the Army's transformation initiative through technology insertion. The ACUS MOD will implement a prioritized set of tactical operational requirements/capabilities to support current and emerging Army XXI C4ISR initiatives. These capabilities include increased network services, information assurance, network management, enhanced reachback capabilities, and the transport velocity and capacity required to support the warfighter's increasing need to pass high-speed data, voice, video, and imagery by the recapitalization of legacy systems.

The ACUS MOD Program includes the following products: Asynchronous Transfer Mode (ATM) upgrade provides increased data and video capacity on the digitized battlefield; the High Capacity Line of Sight Radio (HCLOS) will provide the larger transmission "pipes" required to transport data on the digital battlefield; the Tactical High Speed Data Network (THSDN) will be an interim solution to provide minimum bandwidth to support enhanced data access through MSE; the Single Shelter Switch (SSS) and High Mobility Digital Group Multiplexer (HMDA) are downsized versions of the legacy TRI-TAC systems, providing for greater deployability and mobility; the TS-21 BLACKJACK (AN/UXC-10) is a rugged, secure tactical fax machine compatible with existing COMSEC; and the Brigade Subscriber Node (BSN) provides an integrated switching/transmission shelter providing high speed ATM backbone and HCLOS for voice/data/video capabilities in the Interim Brigade Combat Teams (IBCTs).

FOREIGN COUNTERPART

No known foreign counterpart

FOREIGN MILITARY SALES

Similar ATM and HCLOS upgrades are planned for Taiwan's Improved Mobile Subscriber Equipment (IMSE).

PROGRAM STATUS

- 1QFY00 SSS Initial operational testing and evaluation completed; The SSS program is in production; 30 units are currently on contract.
- 3QFY00 THSDN received conditional modification work order release in June 2000, currently being fielded.

- 4QFY00 ATM/HCLOS upgrades have been fielded to the First Digitized Division unit at Ft. Hood (124th Sig Bn); Completed customer test; Contract options will be used for balance of First Digitized Corps (FDC).
- 1QFY01 AN/UXC-10 fielding to FORSCOM units started; TS-21 Fax procured for field/issue to authorized Reserve and Guard units; BSN program presently in production; New equipment training for BCT 1.
- 1QFY01 The AN/UXC-10 facsimile will be procured for field/issue to authorized Reserve and Guard units.
- 2QFY01 THSDN will introduce dynamic name service; BSN will equip the 334th Signal Company.

PROJECTED ACTIVITIES

- 2001–04 ATM/HCLOS fielding of FDC units.
- 3QFY01–05 Fielding of HMDA system to Active Army completed; Reserve components scheduled.
- 4QFY01 BSN will complete operational testing.

PRIME CONTRACTORS

ATM, SSS, THSDN: General Dynamics (Taunton, MA)

HCLOS: BAE Systems (Quebec, Canada) HMDA: Laguna Industries (Laguna, NM) TS-21 Fax: GD/CRYPTEK (Taunton, MA)

BSN: CECOM (Ft. Monmouth, NJ)



* See appendix for list of subcontractors

